**MDNA55: A Molecular Trojan Horse**

**MDNA55: TARGETING THE INTERLEUKIN-4 RECEPTOR**

- MDNA55 is an experimental agent in clinical development for intra-tumoral treatment of GMB and other CNS tumors by CED
- MDNA55 consists of a bioengineered circularly permuted IL-4 and other CNS tumors
- MDNA55 binds to IL-4 receptor (IL-4R) overexpressed by GBM and immunosuppressive cells of the tumor microenvironment

**MDNA55-05: PLANED AND INFUSED VOLUMES**

Summary of interim results: analysis was conducted for the first 15 patients

<table>
<thead>
<tr>
<th>Volume Enhancing Mass (ml)</th>
<th># Catheters for infusion</th>
<th>Vi (ml)</th>
<th>Dose (µg)</th>
<th>Vd (ml)</th>
<th>Vd/Vi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8.0</td>
<td>2.5</td>
<td>38.2</td>
<td>50</td>
<td>69.3</td>
</tr>
<tr>
<td>Median</td>
<td>5.0</td>
<td>2</td>
<td>35</td>
<td>40.5</td>
<td>59.9</td>
</tr>
<tr>
<td>MAX</td>
<td>30.3</td>
<td>4</td>
<td>66</td>
<td>99</td>
<td>130.2</td>
</tr>
<tr>
<td>MIN</td>
<td>1.6</td>
<td>1</td>
<td>12</td>
<td>18</td>
<td>28.3</td>
</tr>
</tbody>
</table>

**OVERALL ESTIMATED COVERAGE OF TARGET AREA**

Summary of interim results: analysis was conducted for the first 15 patients

- Enhancing lesion
- Enhancing lesion + 1 cm Margin

| Mean | 73% | 64% |
| Median | 77% | 62% |
| MAX | 94% | 95% |
| MIN | 46% | 39% |

Percentages are the fraction of the target volumes covered by the determined Gadolinium distribution at end of infusion.

**CONCLUSIONS**

- Realtime imaging with co-infused GdDTPA distribution has enabled optimization of catheter placement and infusion parameters
- Initial results on tumor coverage are encouraging with 75% of enhancing tumor receiving drug by CED at the end-of-infusion imaging
- Significant safety events have been manageable with standard measures
- Further refinement of MDNA55 regime can enhance patient benefits

**REFERENCES**


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